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## Amendments to the Claims:

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This listing of claims will replace all prior versions, and listings, of claims in the application.

## 1.-20. Cancelled.

- 21. (New) A method for the determination of the sex of an avian subject, the method comprising contacting a sample from said subject with a nucleic acid probe comprising an at least 6 base pair fragment from a target nucleic acid sequence FAF-4 as shown in Figure 11, or a sequence complementary or homologous thereto.
- 22. (New) A method as claimed in claim 21, in which the nucleic acid probe comprises a probe sequence of at least 15 nucleotides.
- 23. (New) A method as claimed in claim 21, in which the nucleic acid probe is sequence FAF-4 as shown in Figure 11 or a fragment thereof.
- 24. (New) A method as claimed in claim 21, in which the avian is a member of Class Aves.
- 25. (New) A method as claimed in claim 24, in which the avian is selected from the group consisting of *Gallus gallus* (chicken), turkey, quail, and guinea fowl.
- 26. (New) A method as claimed in claim 21, in which the sample is allantoic fluid or amniotic fluid.
- 27. (New) A method as claimed in claim 21, in which the sample is taken from an egg.

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- 28. (New) A method as claimed in claim 21, in which the analysis of the sample comprises a nucleic acid amplification procedure.
- 29. (New) A method as claimed in claim 28, in which the nucleic acid amplification procedure is exponential amplification of the target sequence.
- 30. (New) A method as claimed in claim 29, in which the nucleic acid amplification procedure is linear amplification of the target sequence.
- 31. (New) A method as claimed in claim 30, which comprises amplification of RNA in the sample.
- 32. (New) An isolated nucleic acid molecule as shown in Figure 11.
- 33. (New) A kit of parts comprising a nucleic acid probe comprising an at least 6 base pair fragment from an isolated nucleic acid molecule FAF-4 as shown in Figure 11 for determining the sex of an avian subject, or a sequence complementary or homologous thereto.
- 34. (New) A polypeptide or fragment thereof coded for by a nucleic acid sequence of claim 32.
- 35. (New) A polypeptide or fragment thereof as claimed in claim 34, wherein the sequence comprises a sequence as shown in Figure 15(d).
- 36. (New) A vector comprising a nucleic acid sequence of claim 32.
- 37. (New) A host cell comprising a vector as defined in claim 36.
- 38. (New) An antibody to a polypeptide as defined in claim 34.

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- 39. (New) An antibody as claimed in claim 38, which is a monoclonal antibody.
- 40. (New) A method for the determination of the sex of an avian subject, the method comprising contacting a sample from said subject with an antibody to a polypeptide as defined in claim 34.
- 41. (New) A kit of parts comprising an antibody as defined in claim 38 for determining the sex of an avian subject.